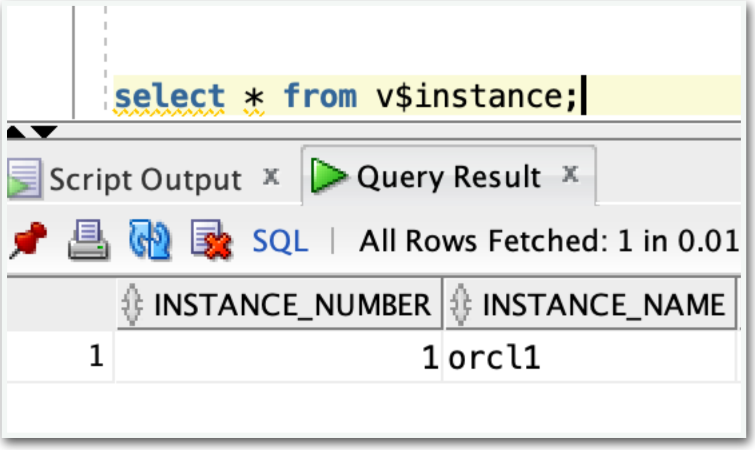
Are global Context variables working on Oracle RAC?

Since version 11.2 Global Application Contexts are working correctly in RAC
This means that these global contexts are synchronised between RAC nodes.

This is a small demonstration.

We are connected to RAC node 1

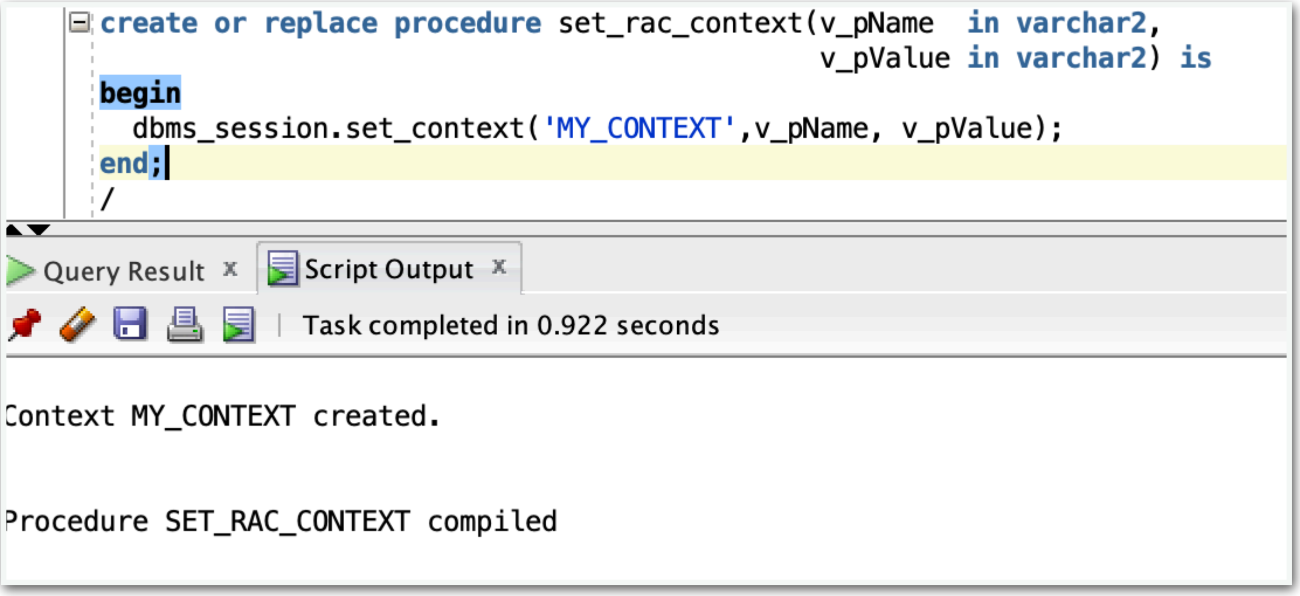
If you have two nodes the SCAN listener will automatically balance the connections.
So there is a good chance that the second connection will land on the second node)
It can be forced by specifying the node in the connect string (



```
select * from v$instance;
```

	INSTANCE_NUMBER	INSTANCE_NAME
1	1	orcl1

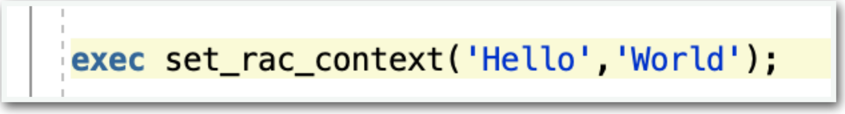
Create the setter (the name of the procedure set_rac_context is just a name, and has nothing to do with RAC databases or on RAC databases)



```
create or replace procedure set_rac_context(v_pName  in varchar2,
                                            v_pValue in varchar2) is
begin
  dbms_session.set_context('MY_CONTEXT',v_pName, v_pValue);
end;
/
```

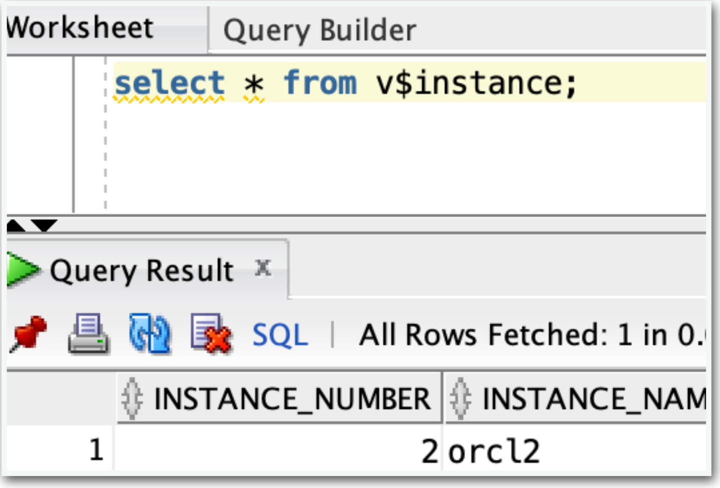
```
Context MY_CONTEXT created.


Procedure SET_RAC_CONTEXT compiled
```

Set the name value pair.



```
exec set_rac_context('Hello','World');
```

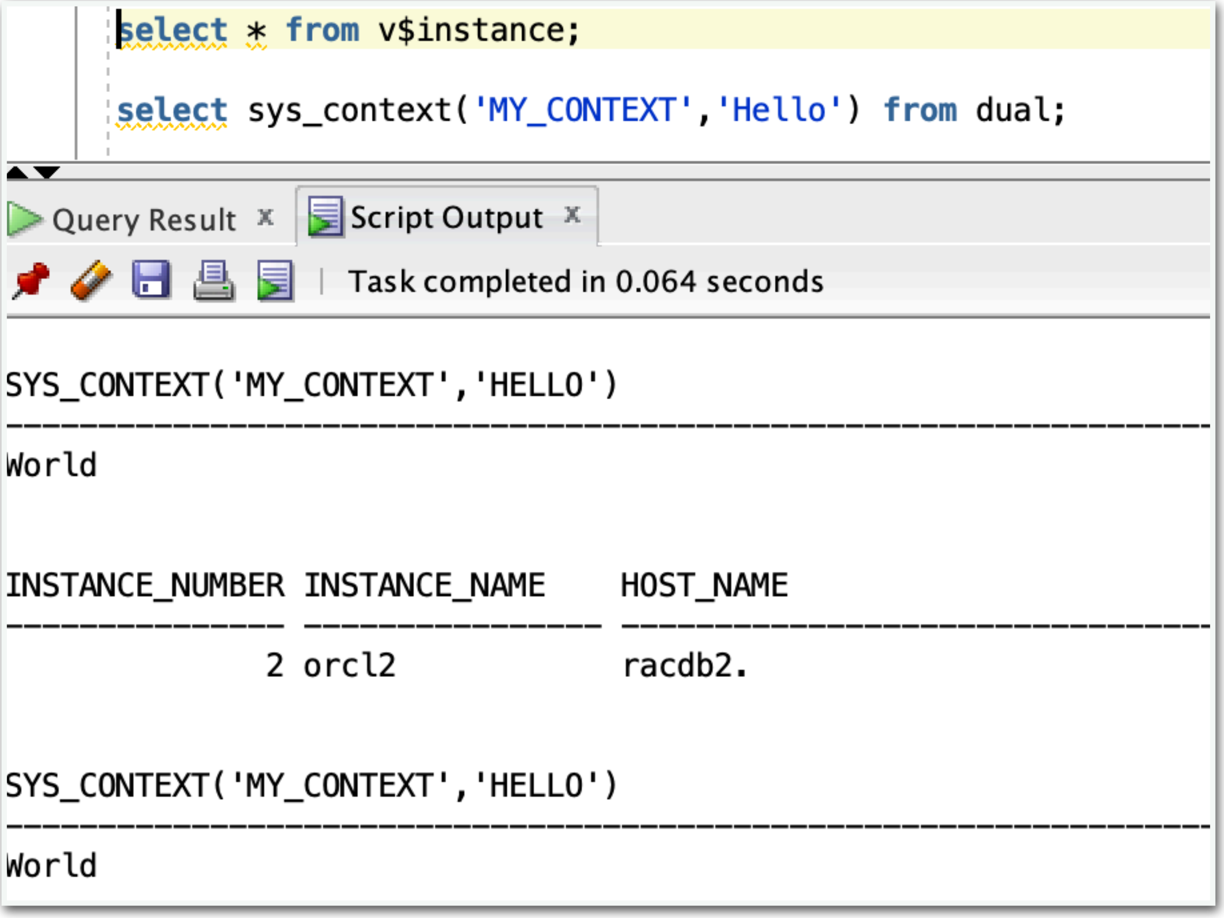
Now we are connected to instance 2.



```
select * from v$instance;
```

```
  INSTANCE_NUMBER INSTANCE_NAM
1               2 orcl2
```

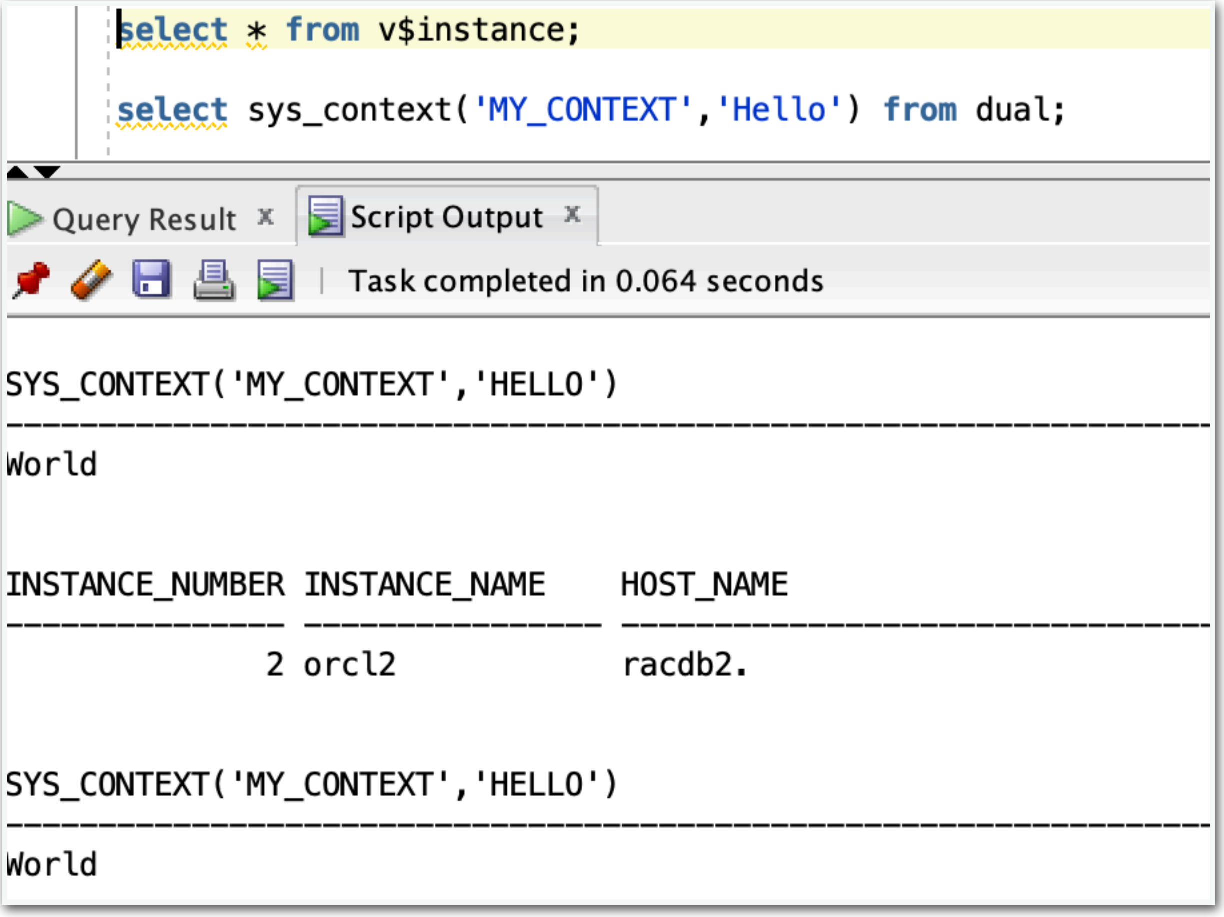
And we read back the value on node 2.



```
select * from v$instance;

select sys_context('MY_CONTEXT','Hello') from dual;
```

```
SYS_CONTEXT('MY_CONTEXT','HELLO')
--------------------------------------------------------------------------------
World


INSTANCE_NUMBER INSTANCE_NAME    HOST_NAME
--------------- ---------------- ------------------------------
              2 orcl2            racdb2.


SYS_CONTEXT('MY_CONTEXT','HELLO')
--------------------------------------------------------------------------------
World
```

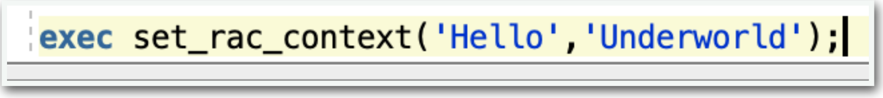
It also works in the other direction.

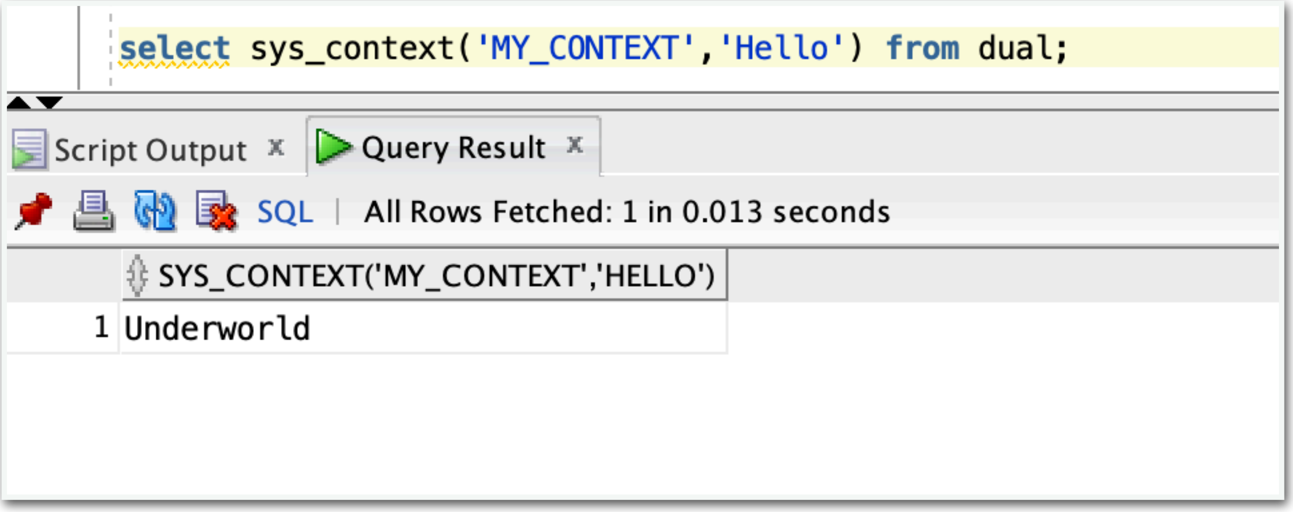

```
select * from v$instance;

select sys_context('MY_CONTEXT','Hello') from dual;
```

Task completed in 0.064 seconds

```
SYS_CONTEXT('MY_CONTEXT','HELLO')
--------------------------------------------------------------------------------
World


INSTANCE_NUMBER INSTANCE_NAME    HOST_NAME
--------------- ---------------- ----------------------------------------------------------------
              2 orcl2            racdb2.


SYS_CONTEXT('MY_CONTEXT','HELLO')
--------------------------------------------------------------------------------
World
```

Now we set the variable to Underworld


```
exec set_rac_context('Hello','Underworld');
```

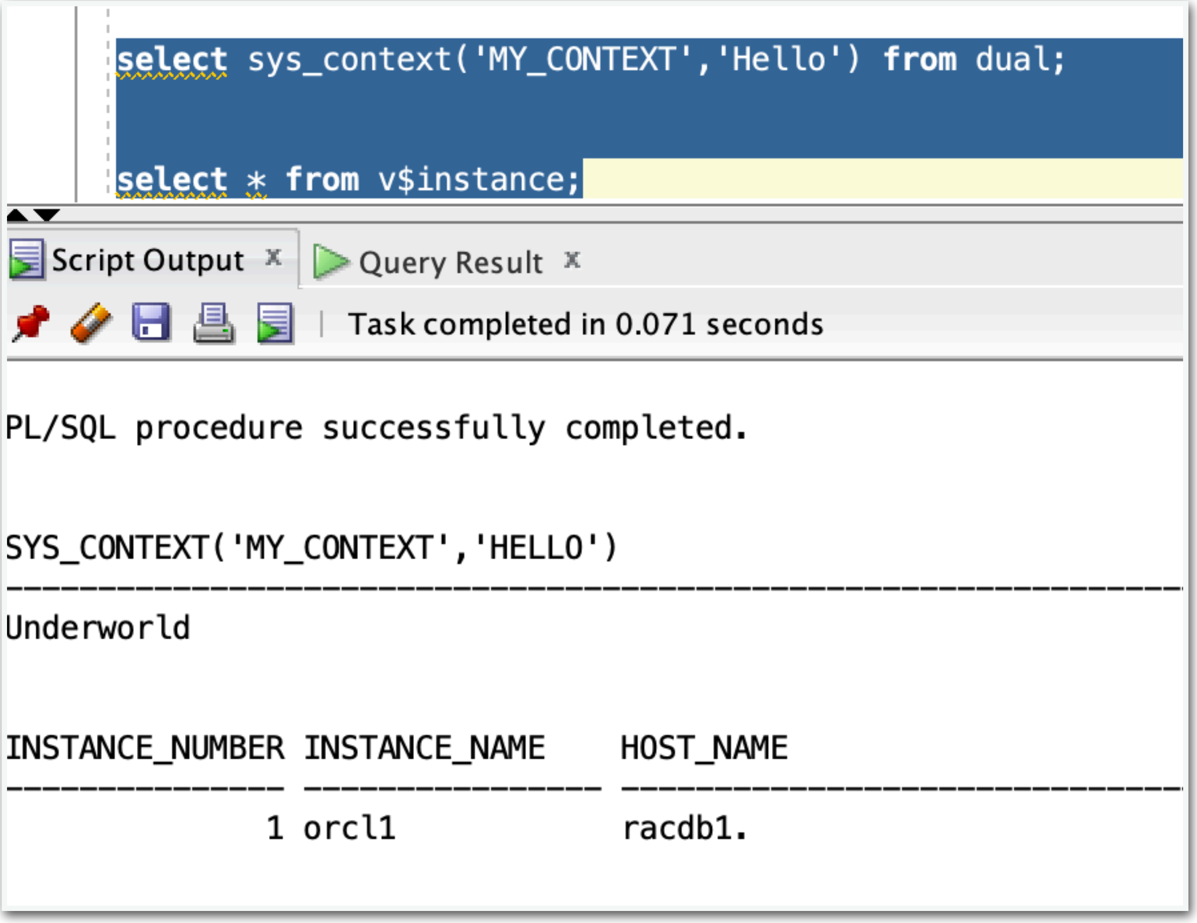

```
select sys_context('MY_CONTEXT','Hello') from dual;
```

All Rows Fetched: 1 in 0.013 seconds

	SYS_CONTEXT('MY_CONTEXT','HELLO')
1	Underworld

done

Back on node 1.



```
select sys_context('MY_CONTEXT','Hello') from dual;

select * from v$instance;
```

```
PL/SQL procedure successfully completed.


SYS_CONTEXT('MY_CONTEXT','HELLO')
----------------------------------------------------------------------
Underworld


INSTANCE_NUMBER INSTANCE_NAME    HOST_NAME
--------------- ---------------- ------------------------------
              1 orcl1            racdb1.
```

Its magic